

ABSTRACT OF THE DISCLOSURE

An apparatus for handling a pair of sheet metal workpieces to be welded is provided that includes a first workpiece holder, a second workpiece holder, at least one backing element, and at least one squeeze roller. The first and second workpiece holders are positioned so that an edge of one of the pair of sheet metal workpieces is in contact with, or separated a gap from, an edge of the other sheetmetal workpiece. The backing element is disposed on a first side of the sheet metal workpieces, and the squeeze roller is disposed on a second side of the sheetmetal workpieces opposite the first side. The squeeze roller is substantially aligned with the backing element. The squeeze roller is formed as a body symmetrical in rotation. Force selectively applied to the squeeze roller will cause plastic deformation of one of the pair of sheet metal workpieces and thereby cause the deformed sheet metal workpiece to extend into the gap.

TECHNICAL FIELD